

Figure 1

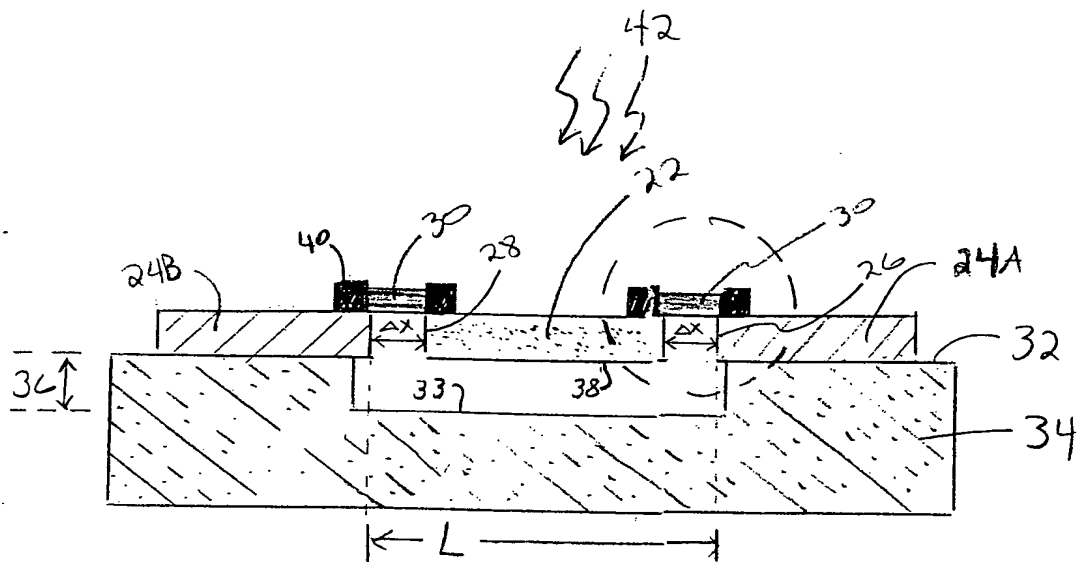


Figure 2

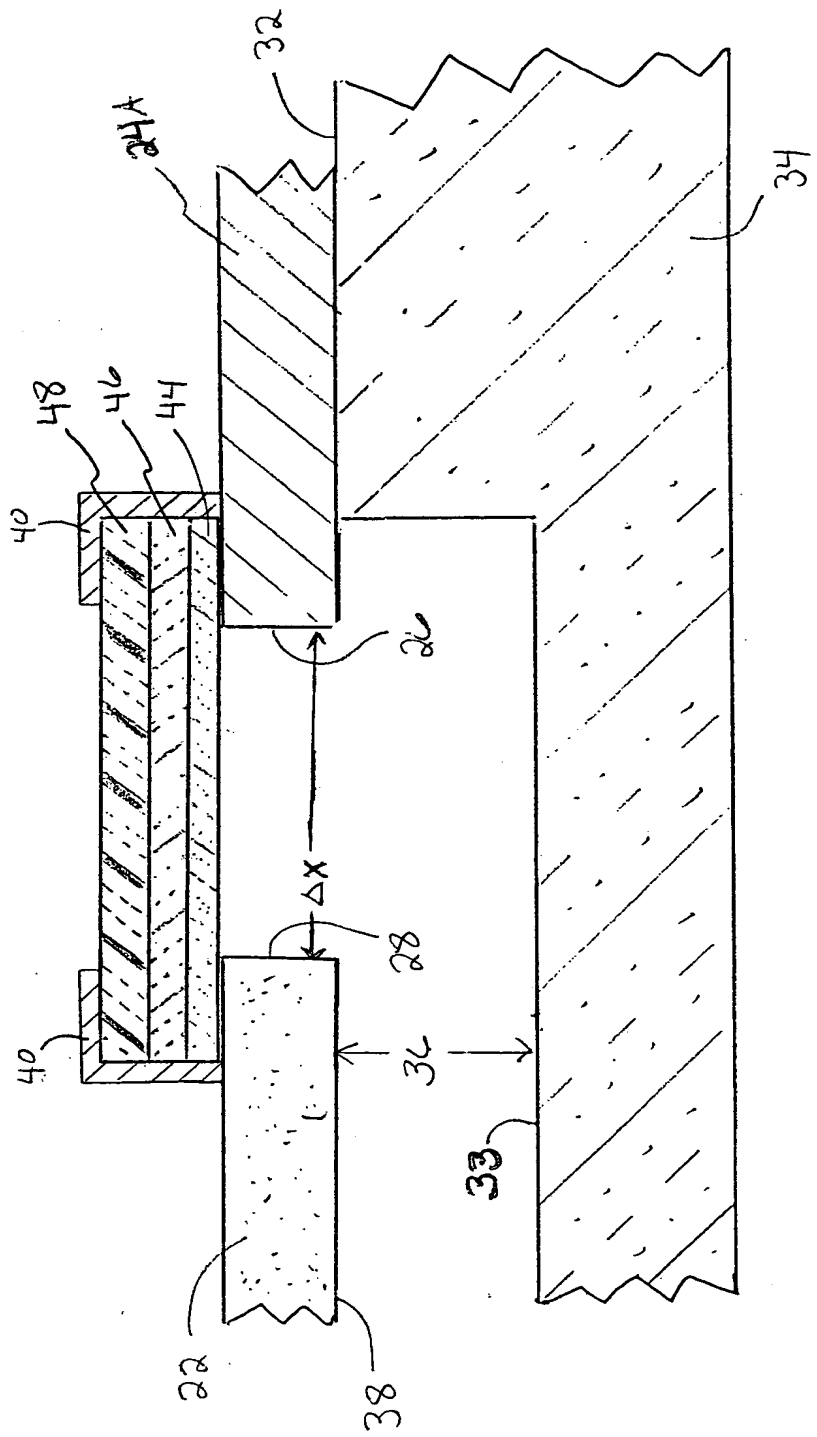


Figure 3

Conductive/ HTS

NEP (pW) System
NEP (pW)
NEP (pW) averaged (N times)
Temperature (K)
Unit Cell width (um)
Fill Factor (%Area)
Bridge Si3N4 Eff Thickness (A)
Leg SiNi Thickness (A)
Leg Metal Thickness (A)
Leg Width (um)
Leg Length (um)
TCR %/K
Bolometer Resistance (ohms)

Conductively coupled
with Normal Metal
25 microns

	A	B	C	D	E	F	G
	Normal Metal Cool to 77K	HTS antenna to load connection 25 microns	HTS antenna to load connection 25 microns	HTS antenna to load connection 15 microns	HTS antenna to load connection 10 microns	HTS antenna to load connection 5 microns	HTS antenna to load connection 5 microns
300	100	0.9	0.25	0.088	0.041	0.011	0.011
210	88	0.81	0.17	77	77	40	40
210(Sqrt49)=30	88(Sqrt125)=6.1	0.61	0.17	15	10	5	5
300	77	77	77	95	95	95	95
25	25	25	25	500	500	500	500
95	95	95	95	1500	1000	400	200
6000	6500	2000	1750	1000	400	200	200
6000	6000	5000	2000	0.5	0.5	0.5	0.5
2000	2000	5000	2000	250	250	250	250
10	10	1	1	10	2.4	2.4	2.4
25	25	250	250	99200	248000	248000	248000
2.4	2.4	99,200	99,200				
50,000	50,000						

Figure 4

NEP (Watts)

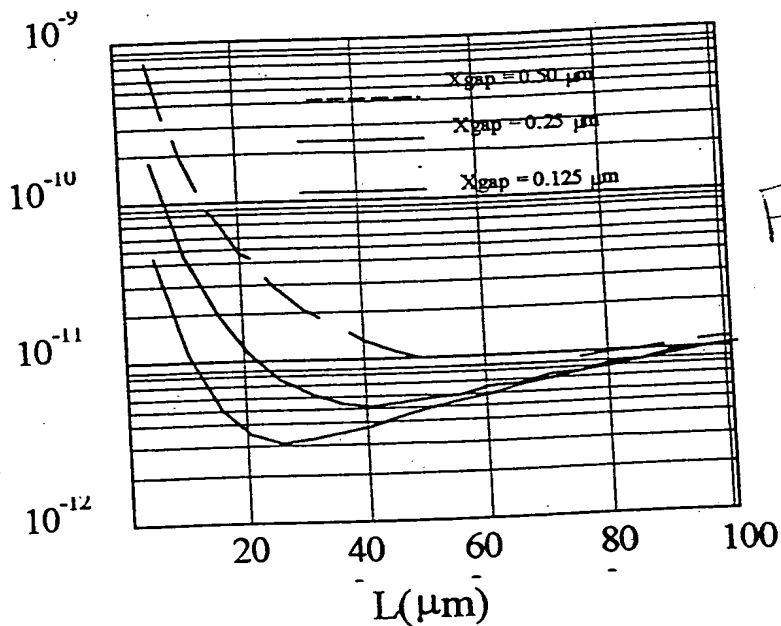


Figure 5

NEP
(W)

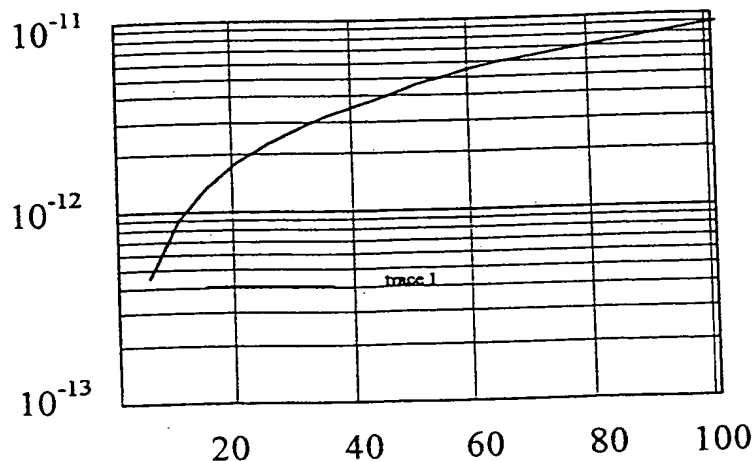


Figure 6